Connecticut Department of Transportation
Response to FHWA Docket No. FHWA-2001-11130
Work Zone Safety
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Responses to Request for Comments:

General:

1. Should there be a National policy to promote improved mobility and safety in highway construction and maintenance?

☐ NO ☒ YES

If yes, should the National policy be incorporated into the (select one):

☐ Regulation or ☒ as Guidance that outlines guidelines and best practices for implementation?

2. Are the current provisions of 23 CFR 630, Subpart J, adequate in meeting the mobility and safety challenges of road construction and maintenance projects encountered at all stages of project evolution?

☐ NO ☒ YES

If you answered no that they are not adequate, what are the provisions and/or sections that need to be enhanced and/or modified to ensure mobility and safety in and around work zones?
Please List:

3. Should work zone regulations be stratified to reflect varying levels and durations of risk to road users and workers, and disruptions to traffic?

☐ NO ☒ YES

If you answered yes, which of the following would be the most appropriate stratification factors. (choose as many as you want)

- ☒ Duration,
- ☒ Length,
- ☒ Lanes Affected,
- ☒ Average Daily Traffic (Adt)
- ☒ Road Classification,
- ☒ Expected Capacity Reduction,
- ☒ Potential Impacts:
  - ☒ On Local Network
  - ☒ Businesses

4. Currently, there are several definitions for work zone, as defined by the MUTCD, ANSI D16 (proposed), NCUTLO and NHTSA. These definitions, even though similar in basic structure and implication, differ in length and the degree of detail addressed. Should there be a common National definition for work zone to bring about uniformity?

☒ **MUTCD defines a work zone** in Part 6, Temporary Traffic Control, as an area of a highway with construction, maintenance, or utility work activities. Signs, channelizing devices, barriers, pavement markings, and/or work vehicles typically mark a work zone. It extends from the first warning sign or rotating/strobe lights on a vehicle to the END ROAD WORK sign or the last temporary traffic control device.

☐ **NCUTLO adds to this definition** in Section 4 Of its Work Zone Model Law, by including the following: A work zone may be for short or long durations and may include stationary or moving activities, including: Long-term highway construction such as building a new bridge, adding travel lanes to the roadway, extending an existing roadway, etc. Short-term highway maintenance may include such activities as striping the roadway, median, roadside grass mowing/landscaping, pothole repair, etc. Short-term utility work may include such activities as repairing electric, gas, or water lines within the roadway. The work zone does not include private construction, maintenance or utility work outside the highway.

☐ **NHTSA. Model Minimum Uniform Crash Criteria (MMUCC)** states that a work zone is a segment of the roadway marked to indicate that construction, maintenance, or utility work is being done. A work zone extends from the first warning sign to the end construction (work) sign or the last traffic control device. Work zones mayor rnay not involve workers or equipment on or near the road. A work zone may be stationary (such as repairing a water line) or moving (such as re-striping the centerline); it may be short term (such as pothole patching) or long term (such as building a new bridge).

☐ ANSI D16 is proposing a definition for work zone, similar to the NCUTLO definition. It states that a work zone is an area of a trafficway with highway construction, maintenance or utility work activities. A work zone is typically rnarked by signs, channelizing devices, barriers, pavement markings, and/or work vehicles. It extends from the first warning sign or flashing lights on a vehicle to the END ROAD WORK sign or the last traffic control device. A work zone may be for short or long duration and may include stationary or moving activities. Inclusions: Long-term stationary highway construction such as building a new bridge, adding travel lanes to the roadway, extending an existing trafficway, etc.; Mobile highway maintenance such as striping the roadway, median, and roadside

grass mowing/landscaping, pothole repair, etc.; Short-term stationary utility work such as repairing electric, gas, or water lines within the trafficway, etc. Exclusions: Private construction, maintenance or utility work outside the trafficway.

☐ Develop a common National definition of a work zone. Please Define:

Transportation Planning and Programming:

It is important to consider user mobility and safety impacts and worker safety requirements across the different stages of highway project development. Consideration of these impacts should begin early and be consistently coordinated across the planning processes and project development stages. The FHWA expects that such consideration will reduce. the need for recurrent work zones, the duration of work zones, and the disruption caused by work zones.

5. Are impacts to road users due to road construction and maintenance part of the management and operations considerations that are addressed in transportation plan development?

☐NO ☒YES

If you answered yes, please explain how?

Impacts to road users are considered during the design phase to minimize the inconvenience to motorists. Various items are reviewed to determine the limitations of construction operations, such as traffic volumes, type of roadway, and project area, to reduce impacts to motorists. Traffic control plans are developed to promote uniform and safe work zones.

6. To what extent should the metropolitan and statewide transportation planning processes address cross-cutting policy issues that may contribute to increases in project costs

☒ The Use of More Durable Materials,
☒ Life-Cycle Costing,
☒ Complete Closure of Facilities
☒ Information Sharing on Utilities
☒ Consider the Impact of Construction and Maintenance Projects to Road Users in Planning for Future Roadway Improvements At The
  ☒ Metropolitan Level
  ☒ At The Statewide Level?
  ☒ At The Corridor Level
☐ Others, Please Explain:

7. What data and methods are currently available to address the above considerations?

Please List: *A more durable bituminous concrete pavement, Superpave, is being used. Detours are developed for temporary road closures. Call Before You Dig is being used as the shared information source for utilities. The impacts to road users in planning for the future are considered during the design of bridge projects.*

7a. What else would be needed to support such considerations in the Metropolitan Transportation Planning Processes?

Please Explain:

Statewide Transportation Planning Processes

Please Explain:

Corridor Level Transportation Planning Processes

Please Explain:

Project Design for Construction and Maintenance:

In making decisions on alternative project designs, project designers should consider different strategies and practices that may lead to reductions in the need for recurrent road construction and maintenance work, the duration of work zones and the disruption caused by work zones. Examples of such considerations include life-cycle cost analysis, alternative project scheduling and design strategies, such as, full road closures and night time work, using more durable materials, coordinating road construction, estimation of user costs/impacts, risk and reward sharing with contractors, and constructibility reviews for projects.

8. How can the FHWA encourage agencies to incorporate considerations (life-cycle cost analysis, alternative project scheduling and design strategies, etc.) in the decision making process for evaluating alternative project designs?

On select projects (i.e. high visibility, high priority) with significant impact:
Require Life Cycle Costs, Alternate Project Scheduling, Design Strategies, and/or Innovative Contracting.

9. Can user cost be a useful measure to assess alternative means to design and Implement work zones?

☐ NO ☒ YES

If you answered yes, what weight should agencies assign to user costs as a decision making factor in the alternatives evaluation process?

☐ Lightly, ☒ Median, or ☐ Heavily

9a. Should analytical tools, such as QuickZone,QUEWZ-98., be used for the evaluation of various design alternatives and their estimated impact to the public?

☐ NO ☒ YES

9b. What other impact measures should agencies estimate and use for alternatives evaluation?

☒ Delay
☒ Speed
☒ Travel Time
☒ Crashes
☐ Others, Please List:

10. Have utility delays have been cited as roadblocks to efficient project delivery

☐ NO ☒ YES

If you answered yes, what should be done to address this issue? Please Explain:

If possible, the utility work should be completed in an advance project prior to beginning the roadway construction project.

Managing for Mobility and Safe in and Around Work Zones:

There are many methods that can be applied to managing traffic in and around work zones. The application of Intelligent Transportation Systems (ITS) for purposes, such as, traffic management, automated enforcement and traveler information is a useful method to improve transportation mobility and safety. The current and future mobility and safety challenges presented by work zones may require Traffic Control Plans (TCPs) to include traffic management, traveler information and operations considerations (such as ITS based traffic control and traveler information, speed management and enforcement, incident and emergency management, etc.), security considerations, and other considerations (for example, utility location and coordination information).

11. The current regulation specifies the requirement for TCPs for work zones, but does not address the issues of sustained traffic management and operations, or traffic enforcement methods and partnerships. Should the scope of TCPs be expanded to include such considerations?

- ☒ Intelligent Transportation Systems (Its)
- ☐ Automated Enforcement
- ☐ Traveler Information
- ☒ Traffic Management
- ☒ Speed Management
- ☒ Incident and Emergency
- ☐ Security Considerations
- ☐ Other Considerations, Please List:

11a. What are the most appropriate ways to facilitate the inclusion of such considerations in traffic control planning? Please Explain:

Educate those involved in the preparation of TCPs how these features can improve operations.

12. Should Traffic Control Plans address the security aspects of construction of critical transportation infrastructure?

☐ NO ☒ YES

12a. Should TCPs address the security aspects of work zone activities in the vicinity of critical transportation or other critical infrastructure?

☐ NO ☒ YES

13. How should TCPs address ADA requirements? Please Explain:

Yes, in areas where it is reasonable to expect pedestrians, access should be addressed if applicable.

14. Should more flexibility be allowed on who develops TCPs?

- ☒ State DOTs,
- ☐ Municipalities,
- ☐ Contractors
- ☐ Law Enforcement Agencies

14a. How should the responsibility for developing TCPs be assigned? Please Explain: *Traffic control plans should be developed through a collaborative effort by engineers with the*

appropriate experience and knowledge from different units, Traffic, Construction, and Maintenance, within the DOT.

14b. Should traffic Control Plan developer be required to be certified?

☒ NO ☐ YES

If you answered yes, who should do the training and certification? Please Explain:

14c. How can the owners and contractors share the roles, risk and rewards in developing TCPs and implementing and operating work zones? Please Explain:

Training and coordination (including state and local law enforcement/traffic authority, municipalities and utilities) should be provided to project personnel who are responsible for ensuring that traffic control plans are being implemented properly.

15. To ensure roadway mobility and safety and work area safety, should mobility and safety audits be required for work zones?

☒ NO ☐ YES

Should continue with the review and evaluation in accordance with current CFR.

Public Outreach and Communications:

To reduce the anxiety and frustration of the public, it is important to sustain effective communications and outreach with the public regarding road construction and maintenance activity, and the potential impacts of the activities. This also increases the public's awareness of such activities and their impacts on their lives. The lack of information is often cited as a key cause of frustration for the traveling public. Therefore, it is important to identify the key issues that need to be considered from a public outreach and information perspective.

16. How can we better communicate the anticipated work zone impacts and the associated mitigation measures to the public? Who should be responsible for informing the public?

☒ State Government
☒ Local Government,
☐ Contractor ,
☐ Or Other Agency, Please List Others:

17. Should projects with substantial disruption include a public communication plan in the project development process?

☐ No ☒ Yes

If you answered yes, what should such a plan contain? Please Explain:

Public Informational Meetings should be held during the design phase. During construction, press releases are issued and changeable message signs are installed to notify the public of construction activities (such as night work, lane closures, and detours).

Analyzing Work Zone Performance:

Evaluation is a necessary tool for analyzing failures and identifying successes in work zone operations. Work zone performance monitoring and reporting at a nationwide level has the potential to increase the knowledge base on work zones and help better plan, design and implement road construction and maintenance projects.

18. Should States and local transportation agencies report statistics on the characteristics of work zones to appropriate State or Federal agencies?

☒ NO ☐ YES

19. Should States and local transportation agencies report statistics on the mobility performance of work zones?

☒ NO ☐ YES

20. Are the currently used measures for safety (typically, crashes, fatalities and injuries) appropriate to analyze work zone performance?

☒ NO ☐ YES

If you answered no, what other measures should be considered? Please Explain:
Work zone performance should also be measured in o(her ways such as: how efficiently traffic. travels through the work zone, the number of close calls, the delay to motorists, how effective the signs and pavement markings are.

20a. Are current mechanisms for collecting measures for safety information adequate?

☐ No ☒ Yes

If you answered no, how can we improve them? Please Explain: